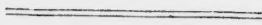


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Docks.*

REPORT
OF
SPECIAL COMMITTEE
OF THE
GEOLOGICAL AND MINING SECTION
OF THE
CANADIAN INSTITUTE.



TORONTO:
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1888.

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REPORT

GEOLOGICAL AND MINING SECTION

A Committee of the Geological and Mining Section, consisting of Wm. Hamilton Merritt, F.G.S., Chairman; Archibald Blue, Secretary; Dr. P. H. Bryce, Mr. John Notman and Mr. R. W. Phipps, have made a Report on the Mining Industries of Canada, which states:

1. That as shown by successive annual reports of the Geological Survey, extending over a period of more than forty years, the known mineral resources of our country are a vast and valuable possession. In precious metals there is reason to believe that we have rich occurrences of gold and silver; while in the economic minerals the country is pre-eminently rich in iron, copper, gypsum, apatite and coal. We have also manganese, barytes, antimony, plumbago, asbestos, salt, petroleum, slates, building stone, marbles, limes, cements, mineral pigments and minerals applicable to the fine arts in proved abundance.

The recent discoveries of copper and gold in the vicinity of Sudbury, of new silver lodes in the district of Port Arthur, of anthracite and bituminous coals on the eastern slope of the Rocky Mountains, as well as various new discoveries of gold, silver, lead and coal in the heart of British Columbia, now accessible by means of the Canadian Pacific Railway, encourage the hope that a systematic survey of the country will reveal stores of vast extent and richness, the existence or locality of which is not now suspected.

2. Your Committee have obtained information relating to the mineral and metallurgical products of the United Kingdom of Great Britain and Ireland from the annual reports prepared by Her Majesty's Inspectors of Mines, and to the same in the United States from returns compiled by the "Division of Mining Statistics" of the United States Geological Survey.

From one of the first-mentioned reports a good deal of information has been obtained concerning the trade between the United Kingdom and her colonies, and also the production of the principal colonies.

The data for the tables illustrating the trade between the Dominion and the United Kingdom has been obtained from our Trade and Navigation Returns, and the trade with the United States from the same source, and also from the Commerce and Navigation Returns of the United States.

While these latter tables have been made up to the year 1886, though it is feared more or less imperfectly owing to varying and incorrect returns, much of the trade of Great Britain, both with her colonies and the rest of the world, is from the returns of the year 1883, which was the only report available to your Committee until quite recently, when the returns for 1884 and 1885 were received; but it is found that in the aggregate the variation between the returns for the years 1883 and 1885 is so small, and the work of sifting out the special returns for the colonies (which are not kept separate) so laborious, that it was thought the returns above mentioned would serve every requisite on this occasion. For example, the general summary of the mineral product of the United Kingdom for 1883, was about fifty-six million pounds sterling, for 1884 about sixty-one million pounds sterling, and for 1885 about fifty-eight million pounds sterling.

3. The tables accompanying this report reveal to us at the first glance the small mineral production of Canada, not only in contrast to the United Kingdom, and to our neighbor the United States, but as compared with the other leading colonies.

Taking the figures collected by Her Majesty's Inspectors of Mines for 1884 we have for—

| | |
|--------------------------------|--------------|
| African Colonies..... | \$15,905,181 |
| Asiatic (including India)..... | 5,532,039 |
| Australasia..... | 47,885,069 |
| British North America..... | 6,108,995 |

The following table makes a brief comparison between ourselves and our neighbors showing the total number of miners employed in both countries and the production of copper, iron and salt in the last census years respectively :—

| | Canada. 1880. | United States 1879. | Ontario. 1880. | Michigan. 1879. |
|-----------------------|------------------|------------------------|-------------------|--------------------|
| No. of miners..... | 6,541 | 234,228 | 493 | 6,978 |
| Copper ore, tons..... | 8,177 | 1,007,490 | 170 | 938,960 |
| Iron ore, tons..... | 223,057 | 7,974,806 | 91,887 | 1,837,712 |
| Salt, bbls..... | 472,000 | 3,521,221 | 472,000 | 2,485,177 |

In 1886, according to the Report on Minerals in Canada by the Geological Survey, the total value of mineral production was \$10,529,361 (or \$11,529,361, errors corrected) while the total value of mineral production in the United States in the same year, according to the Report on Mineral Resources by the Geological Survey of that country, was \$459,327,888—being a proportion of about 1 to 40.

Your Committee are emphatically of opinion that this great disproportion does not exist in the mineral resources of the two countries.

4. From Table "A," accompanying this report, it will be seen that for the year 1886, the imports into Canada of mining and crude metallurgical products from the United Kingdom were \$6,880,103 and from the United States \$3,448,776, while the exports from Canada in the same year to the United Kingdom were \$591,632 and to the United States \$3,187,163.

The above figures are from the Trade and Navigation Returns of the Dominion. We give a separate table "Aa," compiled from the United States Trade Returns in order to show the remarkable difference there is in the returns of the same article given by the two countries.

In each case there was a balance against us of about six millions of dollars, but it will be borne in mind that the tariff of the United States is in many productions practically prohibitory.

Again, taking Canada's exports of produce of the mine to Great Britain, the United States and all other countries for the ten fiscal years 1877-1886, we have the following figures :

| YEAR. | Great Britain. | United States. | Other Countries. |
|-----------|----------------|----------------|------------------|
| | \$ | \$ | \$ |
| 1877..... | 1,061,201 | 2,413,525 | 169,314 |
| 1878..... | 142,374 | 2,472,979 | 200,994 |
| 1879..... | 265,305 | 2,636,334 | 181,261 |
| 1880..... | 216,867 | 2,495,624 | 164,860 |
| 1881..... | 253,652 | 2,346,529 | 167,648 |
| 1882..... | 311,456 | 2,418,021 | 284,096 |
| 1883..... | 443,831 | 2,198,014 | 329,041 |
| 1884..... | 519,672 | 2,505,501 | 221,919 |
| 1885..... | 485,408 | 2,898,518 | 255,611 |
| 1886..... | 589,832 | 3,115,696 | 245,619 |
| | 4,289,598 | 25,500,741 | 2,220,363 |

5. Believing it would be of interest to ascertain the trade of the United Kingdom and of the United States as well as that of Canada with the world at large in minerals and metallurgical products, your Committee have prepared two sets of tables with this in view.

The first set "B" take the exports and imports for the years 1881 to 1884 inclusive. They shew that on the average the values of exports were, from

| | |
|------------------------|---------------|
| Great Britain..... | \$228,908,727 |
| The United States..... | 72,500,654 |
| Canada..... | 3,338,231 |

and that the values of imports were, to

| | |
|------------------------|------------|
| Great Britain..... | 98,801,964 |
| The United States..... | 72,887,652 |
| Canada..... | 24,349,898 |

The second table "C" treats more fully with the detail and takes into consideration only the crude metallurgical products.

From this we get values of exports of

| | United Kingdom. | United States. |
|----------------------------|-----------------|----------------|
| Ores..... | \$ 54,149,091 | \$13,770,477 |
| Metallurgical Product..... | 176,560,594 | 65,262,079 |
| Total | \$230,709,688 | \$79,032,556 |

While the values of imports were :

| | United Kingdom. | United States. |
|----------------------------|-----------------|----------------|
| Ores | \$33,512,356 | \$ 9,033,986 |
| Metallurgical Product..... | 33,433,902 | 54,775,490 |
| Total | \$66,946,258 | \$63,809,476 |

The first table shows us that the United Kingdom exports three times as much of minerals and their products as the United States, while she imports one-third more than the United States.

From the second table we gather that the United Kingdom imports about four times as much ore matter as the United States and a little more than one-half the crude metallurgical product.

The imports of ores to the United Kingdom are chiefly copper ores and regulus, silver ore, iron ore, iron pyrites and phosphates, with lesser quantities of ores of lead, manganese and gold ; while the United States imports her largest quantities in coal, silver and iron ores and salt, with smaller quantities of clays, copper ores, phosphates and asbestos, and a small quantity of most other economic minerals.

In crude metallurgical productions the United Kingdom imports very large amounts of copper, lead, tin and zinc, while the importation of the United States is chiefly made up of iron and steel, with tin, earthen and China-ware next in importance, and lesser amounts of fertilizers, lead, zinc and marbles.

6. A Table " D " has also been prepared shewing the trade carried on by the United Kingdom with Canada, with her other colonies and also with the rest of the world in mining and crude metallurgical product.

This shews that the colonies do as yet but a small proportion of business compared with that carried on by the United Kingdom with

foreign countries, the imports to the United Kingdom in 1883 being :

| | |
|---|------------|
| From Canada | \$ 512,471 |
| From Colonies (other than Canada) | 8,137,274 |
| From other Countries..... | 58,281,835 |

While exports from the United Kingdom were :

| | |
|--------------------------------------|--------------|
| To Canada..... | \$ 7,765,344 |
| To Colonies (other than Canada)..... | 51,616,930 |
| To other Countries | 170,975,358 |

A.

From Dominion Trade and Navigation Returns.

EXPORTS, 1886.

| | VALUE IN DOLLARS. | |
|-----------------------------------|--------------------------|-------------------------|
| | To United Kingdom. | To United States. |
| | \$ | \$ |
| Coal, bituminous..... | 76,304 | 1,127,677 |
| Gold | 450 | 1,210,864 |
| Gypsum | | 112,271 |
| Mineral oil..... | | 27,742 |
| Antimony ore..... | 35,320 | 3,000 |
| Copper ore..... | | 291,397 |
| Iron ore..... | | 23,039 |
| Manganese ore..... | 29,853 | 13,001 |
| Silver ore..... | | 25,134 |
| Phosphates..... | 407,314 | 6,817 |
| Plumbago | 1,481 | |
| Salt..... | | 26,714 |
| Sand and gravel..... | | 23,195 |
| Slate | | 4,256 |
| Stone and marble (unwrought)..... | | 59,888 |
| Other articles..... | 40,588 | 159,670 |
| Gypsum (ground)..... | | 18,485 |
| Lime..... | | 18,552 |
| Stone and marble (wrought)..... | 328 | 15,461 |
| | \$591,638 | \$3,187,163 |

IMPORTS, 1886.

| | VALUE IN DOLLARS. | |
|---|----------------------------|---------------------------|
| | From United Kingdom. | From United States. |
| Salt—Bags fine, coarse ; bags coarse and bulk..... | \$ 206,262 | \$ 14,348 |
| Brass—Tubing, bars, strips, wire clots, scrap, sheet and wire..... | 88,625 | 298,960 |
| Cement—Hydraulic, bulk and bags, and Portland.... | 104,592 | 15,441 |
| Coal—Anthracite..... | | 4,095,966 |
| “ Bituminous..... | 199,661 | 2,527,807 |
| Coke..... | 6,037 | 37,798 |
| Copper—Bars, rods, scrap, pig, sheet and wire..... | 92,600 | 132,611 |
| Earthenware..... | 413,223 | 32,367 |
| China and porcelain..... | 76,859 | 9,372 |
| Iron and steel—Dutiable and free, including scrap and wire..... | 4,625,841 | 1,091,986 |
| Lead..... | 149,107 | 5,439 |
| Marble..... | 3,138 | 78,575 |
| Britannia metal, type and babbitt metal, pewter..... | 12,295 | 75,226 |
| Asbestos (manufactured)..... | 548 | 6,283 |
| Mineral substances and ores (not otherwise specified)... | 5,995 | 23,882 |
| Plumbago—Raw and manufactured..... | 118 | 5,663 |
| Mineral oil..... | | 421,730 |
| Products of shale, petroleum, etc..... | 1 | 59,374 |
| Gypsum (manufactured)..... | 2,469 | 6,034 |
| Diamonds and precious stones—Unset..... | 60,634 | 15,970 |
| Paint—Fireproof..... | | 2,143 |
| Slates..... | 1,060 | 25,651 |
| Building stone, granite, flagstone and grindstone.... | 16,312 | 85,513 |
| Tinware and block tin..... | 154,649 | 190,529 |
| Zineware and block zinc..... | 53,434 | 16,584 |
| China—Fire, pipe and other clays and chalk..... | 18,690 | 16,558 |
| Brimstone..... | | 2,809 |
| Tin plates..... | 619,971 | 124,849 |
| Litharge, lime and whiting..... | 35,106 | 15,446 |
| Nickel and bismuth..... | 70 | 289 |
| German silver and silver sheets..... | 2 | 9,981 |
| Sand and gravel..... | | 22,692 |
| | \$6,880,103 | \$9,448,776 |

Aa.

From Commerce and Navigation Returns of the United States.

EXPORTS (TO CANADA), 1886.

| ORE OR METAL. | VALUE IN DOLLARS. |
|---|-------------------|
| | \$ |
| Coal—Anthracite | 2,564,340 |
| “ —Bituminous | 751,895 |
| Copper—Ingots, bars, old, sheets and other manufactures..... | 27,080 |
| Copper ore | 4,680 |
| Earthen and stoneware | 68,310 |
| Chinaware | 8,145 |
| Iron—Pig, bar, carwheels, castings, plates and sheets, railroad bars or rails, iron and steel ; wire, iron and steel..... | 374,182 |
| Iron ore..... | 1,122 |
| Lime and cement..... | 25,047 |
| Marble and stone, unmanufactured ; roofing slate and other manufactures..... | 228,639 |
| Mineral oil—Naphthas, illuminating and lubricating..... | 479,576 |
| Quicksilver..... | 3,666 |
| Salt..... | 4,873 |
| Tin, manufactures of..... | 38,893 |
| Zinc—Pigs, bars, and manufactures of | 11,439 |
| | \$4,591,887 |

IMPORTS (FROM CANADA), 1886.

| ORE OR METAL. | VALUE IN DOLLARS. |
|-------------------------------------|-------------------|
| | \$ |
| Coal—Bituminous..... | 1,014,116 |
| Copper ore | 332,240 |
| Gold bars and bullion..... | 687,705 |
| Silver bullion..... | 1,827 |
| Unspecified mineral substances..... | 3,646 |
| Iron ore | 25,731 |
| Stone, slates, etc..... | 92,756 |
| Mineral oil..... | 15,204 |
| Salt..... | 53,317 |
| Phosphates | 6,740 |
| Gypsum, unground..... | 115,003 |
| Plumbago..... | 2,405 |
| Precious stones and imitations..... | 65,637 |
| | \$2,416,327 |

EXPORTS OF THE UNITED KINGDOM.

| ARTICLES. | 1881. | 1882. | 1883. | 1884. |
|---|--------------|-------------|-------------|-------------|
| | £ | £ | £ | £ |
| Cement | 753,392 | 804,601 | 925,474 | 871,015 |
| Coals | 8,785,950 | 9,564,616 | 10,645,919 | 10,851,130 |
| Products of coals (except dyes) | 565,693 | 781,412 | 1,017,767 | 1,068,900 |
| <i>Metals:</i> | | | | |
| Iron, old | 488,047 | 507,161 | 337,995 | 223,422 |
| Iron, pig & puddled | 4,104,771 | 4,962,185 | 4,077,456 | 2,945,223 |
| Iron, bar, angle, etc. | 2,013,133 | 2,298,533 | 2,034,667 | 1,942,294 |
| Iron, railroad | 5,666,446 | 6,387,219 | 6,014,264 | 4,142,063 |
| Iron, wire | 1,000,844 | 1,330,544 | 926,797 | 692,607 |
| Iron, hoops, sheets, and boiler plates .. | 3,404,790 | 3,943,806 | 3,899,774 | 3,693,001 |
| Iron, tinned plates | 4,163,132 | 4,642,125 | 4,705,403 | 4,746,923 |
| Iron, cast or wrought, and all other mfrs. | 3,964,268 | 4,549,860 | 4,616,660 | 4,580,671 |
| Steel, unwrought .. | 1,871,161 | 2,034,339 | 1,396,556 | 1,127,481 |
| Steel, mfrs. of | 914,311 | 942,534 | 580,644 | 402,380 |
| Telegraph wire | 1,983,663 | 1,042,561 | 1,237,893 | 2,509,153 |
| <i>Copper, unwrought:</i> | | | | |
| Ingots, cakes or slabs .. | 1,228,378 | 909,241 | 1,143,034 | 1,053,135 |
| Wrought or partly w. | 2,208,189 | 2,424,837 | 2,426,439 | 2,513,894 |
| Brass, of all sorts | 384,792 | 444,383 | 432,033 | 452,998 |
| Lead, pig, sheet and pipe | 675,828 | 577,325 | 533,144 | 422,178 |
| Tin, unwrought | 460,506 | 579,557 | 524,049 | 469,210 |
| Zinc, wrought and unwrought | 118,296 | 125,969 | 98,741 | 100,356 |
| Salt | 585,838 | 568,715 | 645,009 | 611,537 |
| Totals..... | £45,341,433 | 49,421,523 | 48,219,718 | 45,419,571 |
| | £220,359,364 | 240,188,602 | 234,347,829 | 220,739,115 |

IMPORTS OF THE UNITED KINGDOM.

| ARTICLES. | 1881. | 1882. | 1883. | 1884. |
|--|--------------|-------------|-------------|------------|
| <i>Metals:</i> | £ | £ | £ | £ |
| Copper ore & regulus | 2,427,761 | 2,609,836 | 2,936,208 | 3,175,066 |
| Unwrought, p't w'rt and old copper... | 2,166,383 | 2,522,393 | 2,413,793 | 2,329,175 |
| Iron ore..... | 2,349,411 | 3,063,091 | 2,750,870 | 2,114,600 |
| Iron in bars.. | 1,140,509 | 1,396,457 | 1,236,735 | 1,165,948 |
| Iron and steel, wro't or manufactured.. | 2,564,823 | 2,474,898 | 2,870,813 | 2,693,422 |
| Lead, pig and sheet | 1,388,109 | 1,266,999 | 1,305,388 | 1,222,325 |
| Silver ore..... | 688,176 | 750,079 | 1,030,542 | 1,089,768 |
| Tin in blocks, ingots, bars or slabs..... | 1,873,472 | 2,538,577 | 2,442,959 | 2,123,799 |
| Zinc, crude in cakes | 755,666 | 708,877 | 640,302 | 700,154 |
| Zinc, manufactures. | 414,813 | 396,936 | 408,206 | 390,157 |
| Petroleum..... | 1,952,444 | 1,721,019 | 2,170,298 | 1,711,313 |
| Pyrites, iron or copper | 1,202,281 | 1,422,684 | 1,356,083 | 1,244,871 |
| Totals..... { | £18,923,848 | 20,871,846 | 21,562,197 | 19,660,598 |
| | \$91,969,901 | 101,437,171 | 104,792,277 | 97,008,506 |

B.

EXPORTS OF THE UNITED STATES.

| ARTICLES. | 1881. | 1882. | 1883. | 1884. |
|--|--------------|--------------|--------------|--------------|
| | \$ | \$ | \$ | \$ |
| Brass and mnfrs. of... | 216,057 | 322,439 | 287,847 | 301,014 |
| Coal—Anthracite.... | 2,091,928 | 2,589,887 | 2,648,033 | 3,053,550 |
| “ —Bituminous..... | 739,532 | 1,102,898 | 1,593,214 | 1,977,959 |
| Copper and mnfrs. of | 876,395 | 748,456 | 2,348,004 | 5,595,859 |
| Iron and steel and manufactures of * .. | 16,608,767 | 17,551,322 | 19,024,894 | 18,369,148 |
| Lead and mnfrs. of.. | 39,710 | 178,779 | 43,108 | 125,156 |
| Marble and stone and manufactures of. . . | 629,795 | 614,430 | 541,553 | 503,260 |
| Mineral oils..... | 40,315,609 | 51,232,706 | 44,913,079 | 47,103,248 |
| Quicksilver..... | 1,124,955 | 959,128 | 1,020,827 | 427,219 |
| Salt..... | 14,752 | 18,265 | 17,321 | 26,007 |
| Tin and mnfrs. of.... | 198,524 | 198,608 | 191,947 | 166,810 |
| Zinc and mnfrs. of... | 143,212 | 138,374 | 82,490 | 31,107 |
| Totals..... | \$63,004,236 | \$75,655,292 | \$73,652,744 | \$77,690,346 |

* Sewing machines and agricultural implements not included.

IMPORTS OF THE UNITED STATES.

| ARTICLES. | 1881. | 1882. | 1883. | 1884. |
|--|--------------|--------------|--------------|--------------|
| | \$ | \$ | \$ | \$ |
| Brass and mfrs. of... | 494,249 | 668,136 | 570,666 | 470,435 |
| Coal and coke... | 2,008,967 | 2,192,689 | 2,084,151 | 2,589,958 |
| Copper and mfrs. of... | 564,923 | 317,172 | 191,285 | 291,603 |
| Iron and steel & mfrs. of (including ore)... | 51,454,574 | 53,898,267 | 40,837,376 | 42,917,747 |
| Lead and mfrs. of... | 163,742 | 211,935 | 170,198 | 92,861 |
| Marble and stone and manufactures of... | 749,763 | 798,542 | 819,567 | 950,217 |
| Metals and mfrs. of, not elsewh'r specif'd | 1,162,913 | 1,429,918 | 1,489,445 | 2,248,814 |
| Mineral oils and other mineral substances... | 112,152 | 187,248 | 141,532 | 89,154 |
| Platinum..... | 294,635 | 334,183 | 391,766 | 373,110 |
| Salt..... | 1,900,610 | 1,561,132 | 1,476,946 | 1,527,455 |
| Slate and mfrs. of... | 46,864 | 45,928 | 49,919 | |
| Tin and mfrs. of... | 18,685,903 | 21,838,261 | 22,903,572 | 5,482,909 |
| Zinc and mfrs. of... | 262,218 | 949,041 | 802,933 | 251,476 |
| Totals..... | \$77,901,513 | \$84,432,452 | \$71,929,356 | \$57,285,739 |

B.

EXPORTS OF CANADA.

| ARTICLES. | 1881. | 1882. | 1883. | 1884. |
|---|-------------|-------------|-------------|-------------|
| | \$ | \$ | \$ | \$ |
| Coal..... | 1,123,091 | 1,078,704 | 1,087,411 | 1,201,172 |
| Gold..... | 767,318 | 930,951 | 911,383 | 952,131 |
| Gypsum, ground and unground..... | 132,787 | 138,180 | 160,794 | 172,928 |
| Lime..... | | | | |
| Mineral oils..... | 631 | 136 | 368 | 7,546 |
| Antimony ore..... | 3,921 | 4,733 | 11,842 | 4,855 |
| Copper ore..... | 150,412 | 139,245 | 150,479 | 214,044 |
| Iron ore and products of iron and steel.... | 445,707 | 571,700 | 556,100 | 354,667 |
| Manganese... .. | 38,738 | 37,485 | 29,417 | 15,851 |
| Silver..... | 34,494 | 15,110 | 14,200 | 12,920 |
| Phosphates..... | 239,493 | 327,667 | 302,716 | 453,322 |
| Salt..... | 39,566 | 36,418 | 17,511 | 17,408 |
| Sand and gravel..... | 12,511 | 13,789 | 17,755 | 14,152 |
| Stone, marble & slate, wrought & unwrou't | 95,726 | 115,167 | 94,880 | 82,392 |
| Total..... | \$3,084,395 | \$3,409,285 | \$3,354,856 | \$3,504,388 |

IMPORTS OF CANADA.

| ARTICLES. | 1881. | 1882. | 1883. | 1884. |
|---|--------------|--------------|--------------|--------------|
| | \$ | \$ | \$ | \$ |
| Brass and mnfrs. of. . . | 276,958 | 362,581 | 383,106 | 393,544 |
| Coal | 4,094,294 | 4,696,007 | 6,389,804 | 7,503,871 |
| Copper and mnfrs. of. . | 160,329 | 222,219 | 243,222 | 235,510 |
| Gold and silver and mnfrs. of. | 233,806 | 333,820 | 345,515 | 230,614 |
| Iron and steel and mnfrs. of * | 12,224,180 | 16,378,344 | 18,253,179 | 13,464,742 |
| Lead and mnfrs. of. . . | 150,292 | 181,354 | 203,100 | 166,804 |
| Marble, slate and stone and mnfrs. of. . . . | 220,323 | 236, '0 | 265,491 | 265,594 |
| Metal, composition and other. | 368,967 | 462,286 | 649,236 | 611,909 |
| Oils, mineral. | 280,638 | 453,250 | 460,728 | 427,641 |
| Salt | 494,633 | 323,807 | 422,367 | 360,192 |
| Zinc and mnfrs. of. . . | 126,469 | 99,736 | 22,599 | 99,742 |
| Tin and mnfrs. of. . . | 413,924 | 946,522 | 1,258,136 | 1,001,769 |
| Total. | \$19,044,813 | \$24,696,366 | \$28,896,483 | \$24,761,932 |

* Not including sewing machines and agricultural implements.

| ORES. | EXPORTS. | | IMPORTS. | |
|--|-------------------------------------|------------------------------------|-----------------------------------|----------------------------------|
| | From United Kingdom, 1883. | From United States, 1886. | To United Kingdom, 1883. | To United States, 1886. |
| | \$ | \$ | \$ | \$ |
| Clays, except ordinary | 935,404 | 9,978 | | 225,323 |
| Coal, anthracite | | 2,707,590 | | 20,140 |
| " bituminous | 51,739,166 | 1,480,940 | | 2,551,954 |
| Coke | | 18,327 | | |
| Cobalt and nickel ore and matter | | 11,687 | | |
| Copper ore & regulus | | 3,068,879 | 2,387,926 | 417,449 |
| Gold ore | | 34,160 | 21,384 | 1,397 |
| Silver ore | | | 5,008,434 | 1,263,257 |
| Iron ore | | 144,652 | 13,369,228 | 1,306,033 |
| Iron pyrites, chiefly cuprous | | | 6,590,563 | |
| Lead ore | 16,524 | | 983,129 | |
| Manganese ore | | | 496,217 | |
| Phosphates | | | 3,955,189 | 426,243 |
| Quicksilver | | 219,259 | | |
| Salt | 1,458,000 | 29,827 | | 1,499,182 |
| Tin ore | | | 3,474 | |
| Zinc ore | | 24,951 | 696,812 | |
| Mineral oil, crude | | 5,859,577 | | 15,581 |
| Marble and stone, un- manufactured | | 159,553 | | |
| Platinum | | | | 356,041 |
| Plumbago | | | | 164,111 |
| Aluminum | | | | 5,298 |
| Bismuth | | | | 117,768 |
| Gypsum | | | | 116,202 |
| Buhr stones, unmnfd. | | | | 40,772 |
| Lithographic stone | | | | 73,884 |
| Mica | | 897 | | 43,107 |
| Charcoal | | | | 35,544 |
| Emery | | | | 83,214 |
| Pumice | | | | 30,128 |
| Talc | | | | 25,394 |
| Mineral subs, not else- where specified | | | | 123,864 |
| Asbestos, crude | | | | 91,089 |
| Total ores | \$54,149,094 | \$13,770,477 | \$33,512,356 | \$9,033,986 |

| METALS. | EXPORTS. | | IMPORTS. | |
|--|-------------------------------------|------------------------------------|-----------------------------------|----------------------------------|
| | From United Kingdom, 1883. | From United States, 1886. | To United Kingdom, 1883. | To United States, 1886. |
| | \$ | \$ | \$ | \$ |
| Brass and mnfrs. of | | 150,807 | | 404,678 |
| Bronze and mnfrs. of | | | | 714,473 |
| Cement | | 123,103 | | 722,576 |
| Asbestos, mnfd. | | 29,303 | | |
| Copper, unwrought, partly wrought, pigs, bars and sheets. . . | 23,660,224 | 2,498,898 | 8,679,717 | 57,651 |
| Copper, mnfrs. of. . . | 45,527 | 108,975 | 362,293 | 122,985 |
| Earthen, stone and chinaware | | 163,908 | | 4,947,621 |
| Fertilizers | | 1,107,657 | | 1,680,473 |
| Iron { Pig. | 138,948,439 | 15,748,569 | | 4,041,366 |
| Iron { Mfrs. of iron and steel. } | | | | |
| Lead, pig, mnfrs. of. . | 2,765,937 | 114,098 | 7,423,354 | 33,278,088 |
| Lime | | | | 865,820 |
| Mineral oil { Refined. . | | 44,340,267 | | 41,107 |
| Mineral oil { residuum . | | | | |
| Slates | 1,216,098 | 605,261 | | |
| Terra alba, etc. | | | | 25,878 |
| Tin plates | | | | |
| Plaster Paris, ground and calcined. | | | | 38,852 |
| Tin, bars, blocks or pig } | 9,042,163 | 157,724 | 11,872,790 | 5,873,752 |
| Tin, mnfrs. of. } | | | | |
| Marble and stone and mnfrs. of. | | | | 872,036 |
| Zinc, blocks and pig. . | 882,206 | 64,410 | 5,095,748 | 119,425 |
| Zinc, mnfrs. of. | | 12,749 | | 49,406 |
| Nickel, mnfrs. of. | | 35,302 | | |
| Platinum, mnfrs. of. . | | 4,048 | | |
| Other metals, metal compts & mnfrs, not elsewhere specified. . | | | | 1,920,103 |
| Total metals | \$176,560,594 | \$65,262,079 | \$33,433,902 | \$54,775,490 |
| Total ores (carried forward) | 54,149,094 | 13,770,477 | 33,512,356 | 9,033,986 |
| | \$230,709,688 | \$79,032,556 | \$66,946,258 | \$63,809,476 |

D.
From Report H. M. Inspectors of Mines, 1883.

| ARTICLES. | EXPORTS FROM UNITED KINGDOM. | | IMPORTS TO UNITED KINGDOM. | |
|---|------------------------------|---|----------------------------|---|
| | To Canada. | To Colonies, (other than Canada.) | To Other Countries. | From Colonies, (other than Canada). |
| Clays (except ordinary). | | \$ 935,404 | | |
| Coal. | \$397,445 | \$7,490,270 | 43,851,449 | |
| Copper, unwrought, wrought, yellow metal and manufactures. | 266,814 | 8,241,082 | 15,132,347 | 2,316,276 |
| Copper ore. | | | | 6,725,734 |
| Iron ore. | | | | 1,851,834 |
| Iron—Pig, bar, angle, bolt, rod, railroad. | | | 38,014 | 13,369,228 |
| Tin plates and sheets, hoops, sheets and boiler plate, wire (except telegraph), cast and wrought, steel, unwrought, iron and steel combined. | 6,735,474 | 33,705,135 | 98,507,840 | |
| Lead—Pig, rolled sheet, piping and tubing. | 145,493 | 1,093,014 | | |
| Lead ore. | | | | |
| Salt. | 120,712 | 400,566 | 1,527,629 | 7,423,354 |
| Slates. | | 104,762 | 930,131 | 886,464 |
| Tin. | 98,726 | 31,794 | 1,111,336 | |
| Tin ore. | | | 8,573,465 | |
| Zinc. | 680 | 550,307 | 331,219 | 5,022,285 |
| Zinc ore. | | | | 6,850,505 |
| Gold ore. | | | | 3,474 |
| Iron pyrites. | | | | 5,095,748 |
| Manganese ore (1882). | | | | 686,604 |
| Phosphates. | | | | 21,384 |
| Silver ore. | | | | 6,590,563 |
| | | | | 21,252 |
| | | | | 24,951 |
| | | | | 354,230 |
| | | | | 278,473 |
| | | | | 40,517 |
| Total. | \$7,765,344 | \$51,616,930 | \$170,975,358 | \$512,471 |
| | | | | \$8,137,274 |
| | | | | \$58,281,835 |